Table of Contents: Volume 27 (2001)

Numbers 1/2

Special Issue: Multimedia Signal Processing
Guest Editors: Antonio Ortega and Abeer Alwan

Guest Editors' Introduction ..... *Antonio Ortega and Abeer Alwan* 5
Quantization Index Modulation Methods for Digital Watermarking and Information Embedding of Multimedia ..... *Brian Chen and Gregory W. Wornell* 7
An Integrated Approach to Image Watermarking and JPEG-2000 Compression ..... *Po-Chyi Su, Houng-Jyh Mike Wang and C.-C. Jay Kuo* 35
MPEG-4 Systems: Architecting Object-Based Audio-Visual Content ..... *Alexandros Eleftheriadis* 55
Enhancement of JPEG-Compressed Images by Re-application of JPEG ..... *Aria Nosratinia* 69
Soft ARQ for Layered Streaming Media ..... *Matthew G. Podolsky, Steven McCanne and Martin Vetterli* 81
Total System Energy Minimization for Wireless Image Transmission ..... *Swaroop Appadwedula, Manish Goel, Naresh R. Shanbhag, Douglas L. Jones and Kannan Ramchandran* 99
Speech-to-Lip Movement Synthesis by Maximizing Audio-Visual Joint Probability Based on the EM Algorithm ..... *Satoshi Nakamura and Eli Yamamoto* 119
Building 3-D Human Face Models from Two Photographs ..... *Qian Chen and Gérard Medioni* 127
Concept and Construction Example of an Interactive Movie System ..... *Ryohei Nakatsu, Naoko Tosa and Takeshi Ochi* 141
Power and Speed-Efficient Code Transformation of Video Compression Algorithms for RISC Processors ..... *Lode Nachtergaele, Toon Gijbels, Jan Bormans, Francky Catthoor and Ivo Bolsens* 161
Exploring Hypermedia Processor Design Space ..... *Chunho Lee, Johnson Kin, Miodrag Potkonjak and William H. Mangione-Smith* 171

Number 3

A Low Power Approach to Floating Point Adder Design for DSP Applications ..... *R.V.K. Pillai, D. Al-Khalili, A.J. Al-Khalili and S.Y.A. Shah* 195
Minimizing Average Schedule Length under Memory Constraints by Optimal Partitioning and Prefetching ..... *Zhong Wang, Timothy W. O'Neil and Edwin H.-M. Sha* 215
G-vector: A New Model for Glitch Analysis in Logic Circuits ..... *Ki-Seok Chung, Taewhan Kim C.L. Liu* 235
A Single Clocked Adiabatic Static Logic—A Proposal for Digital Low Power Applications ..... *Jouko Marjonen and Markku Åberg* 253
Efficient Recursive Digital Filters using Combined Look-Ahead Denominator Distribution and Numerator Decomposition ..... *J. Living, M. Moniri and S.B. Tennakoon* 269
A Compiler-Friendly RISC-Based Digital Signal Processor Synthesis and Performance Evaluation ..... *Jiyang Kang, Jongbok Lee and Wonyong Sung* 297